Work Authorization Statement of Work (SOW) San Jacinto River Waste Pits

CERCLIS No.: TXN000606611 Site ID: 06ZQ January 29, 2016

1.0 PURPOSE. The purpose of this Work Authorization issued to the United States Army Corps of Engineers (USACE) under multi-site Interagency Agreement DW-96-95854901-0 between the Environmental Protection Agency (EPA) and the USACE is to provide technical support to EPA regarding an assessment of an armor cap deficiency area on the northwest part of the armor cap.

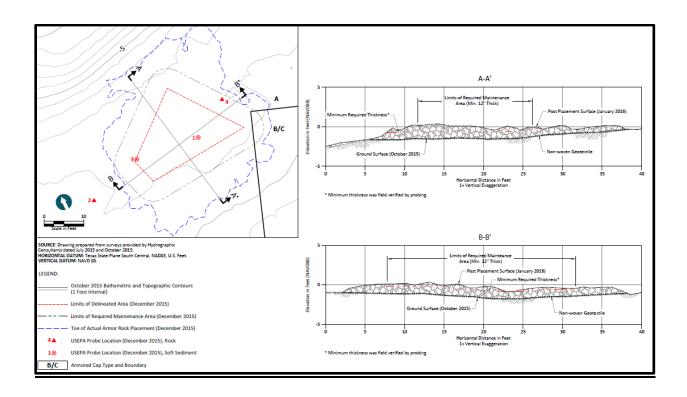
In December 2015 the EPA Dive Team found this area, which was an irregularly shaped area approximately 20-feet by 25-feet, during an underwater inspection of the cap. Although armor rock material was present in this area, it was deficient and did not form a continuous cap as it should have. Following the EPA approval of the repair plan, the Potentially Responsible parties (PRPs) completed repairs in January 2016 by placing an 8-ounce non-woven geotextile fabric over the area, and then covering it with a minimum of 12-inches of rock with a median diameter of 8-inches. Manual probing was used to identify any deficient areas, and additional rock was added where needed.

In general, the technical support will include an assessment of the deficient area and recommendations for inspections and actions to identify any other deficient areas and prevent any future breaches.

2.0 BACKGROUND. The Site consists of several sets of impoundments built in the mid-1960s for the disposal of paper mill wastes and the surrounding areas containing sediments and soils potentially contaminated by the waste materials that had been disposed of in these impoundments. The impoundments are located immediately north and south of the I-10 bridge and on the western bank of the San Jacinto River in Harris County, Texas.

Large scale groundwater extraction by others has resulted in regional subsidence of land in the vicinity of the Site resulting in exposure of the contents of the northern impoundments to surface waters. A time-critical removal action was completed in 2011 to stabilize the pulp waste material in the northern impoundments and sediments within the impoundments to prevent the further release of dioxins, furans, and other chemicals into the environment. The removal consisted of placement of a temporary armor rock cap over a geotextile bedding layer and an impermeable geomembrane in some areas. The total area of the temporary armor cap is 15.7 acres. The cap was designed to withstand a 100-year storm event.

The southern impoundments are located south of I-10 and west of Market Street, where various marine and shipping companies have operations. The area around the former southern impoundments is an upland area that is not currently and has not been in contact with surface water.



2.1 PROJECT POINT OF CONTACT (POCs).

Technical POC: Gary Miller, EPA Region 6, 1445 Ross Avenue, Suite 1200, Dallas, Texas 75202, Remedial Project Manager, 214-665-8318. miller.garyg@epa.gov

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2.2 PROJECT DELIVERY TEAM (PDT).

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3.0 SCOPE OF WORK. This section outlines the tasks that the PDT will perform to accomplish the requirements described in EPA's Work Authorization.

- 1. Conduct a review of the construction, inspection, and maintenance documents for the cap.
- 2. Prepare recommendations for additional underwater inspections and surveying of the entire site to insure there are no more deficient areas in the cap.
- 3. Conduct a review of the inspection protocols and prepare recommendations for improvement.
- 4. Consider alternatives for the cause of the deficient area and prepare a determination of the most likely cause.
- 5. Prepare a determination of the occurrence date of the deficient area.
- 6. Conduct a review of the available sampling results and prepare a determination of the extent of any release of material from the deficient area and the need for any additional sampling, if appropriate, to determine the nature and extent of any release.
- 7. Prepare an evaluation of the contents of the release with respect to all major contaminants at the site.
- 8. Prepare recommendations for any steps to prevent any future breaches to the cap.
- 9. Communicate at least weekly with the EPA Remedial Project Manager (RPM) regarding progress and issues identified during the report review.
- 10. Maintain all technical and financial records associated with this Work Authorization.
- 11. Prepare and submit monthly progress reports and invoices to document monthly and cumulative cost, performance status, and technical progress.
- 12. Include one overnight trip to the San Jacinto River Waste Pits Site for not more than three persons for familiarization with the area and Site conditions.

4.0 DELIVERABLES.

- 1. Submit progress reports and invoices to the EPA RPM for each month no later the 15th day of the following month.
- 2. Submit a draft report to the EPA completing these tasks within 10 weeks of initiation of this Work Authorization.
- 3. Submit a final report within 30-days a receipt of any EPA comments on the draft report.
- 4. Provide technical support to EPA, including preparation of technical memorandums regarding the above issues during the Period of Performance.

5.0 EPA RESPONSIBILITIES. EPA is responsible for providing the relevant site documents.

<u>**6.0 USACE TECHNOLOGY/FOCUS AREA.**</u> ERDC-EL, Environmental Processes and Engineering.

<u>7.0. PERIOD OF PERFORMANCE.</u> It is anticipated that this Work Authorization will cover a time interval of approximately 18 months, or until July 31, 2017.

8.0 SECURITY. Information produced in this study is unclassified.